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MEETING NOTES

TO: Distribution

DATE: October 19, 1993

FROM: Philip Nixon

MEMO #: SP307:102093:02

PROJECT #: Solar Pond IM/IRA

ATTENDANCE:

Fraser Lockhart, DOE
Harlan Ainscough, CDH
Arturo Duran, EPA
Ernie O'Toole, DOE/MMES
Randy Ogg, EG&G
Mark Austin, EG&G
Steve Paris, EG&G
Phil Nixon, ES
Richard Henry, ES

DISTRIBUTION:

Attendees
R. Stegen
L. Benson
A. Conklin
P. Breen
H. Heidkamp
K. Cutter
D. Myers
S. Stenseng
A. Fricke
B. Snyder
T. Kuykendall
T. Evans
B. Cropper
C. Montes
B. Wallace, EG&G (Admin. Record)
K. Ruger, EG&G
K. London, EG&G
R. Wilkinson
Steve Howard, DOD/SMS
Andy Ledford, EG&G

SUBJECT: Solar Pond IM/IRA Team Meeting

1.) OU 4 Phase I Schedule Review

Frazer Lockhart requested that the schedule be expanded to show the 1st Quarter FY94 activities.

Harlan Ainscough requested that "EPA/CDH" be placed in the review and comment activities so the agencies would be aware of their committed review period. Phil Nixon suggested the activity title should be "Team Review" since EG&G/DOE/EPA/CDH will all be reviewing deliverables at the same time.

Ernie O'Toole requested that the issues which require resolution be incorporated onto the schedule.

2.) Comments on Meeting Minutes

Meeting minutes from the October 13, 1993 meeting were distributed. Comments on these minutes are due at the October 26, 1993 meeting.

There were no comments on previous meeting minutes.

3.) Comments on the Issue Resolution Methodology

Phil Nixon indicated that comments had been received from Harlan Ainscough and Ernie O'Toole. These comments will be incorporated into the methodology. Randy Ogg requested that additional comments be submitted to ES by October 20, 1993. **Rich Stegen will revise the document for the October 26, 1993 meeting.**

The recommended "star chamber" representatives are:

DOE - Scott Grace (deputy director)
EPA - Martin Hesmerk
CDH - Gary Baughman

If this team cannot resolve an issue, then a higher level team will be formed. The tentative members of the second level team would include:

DOE	-	Rich Schaustburger (Director)
EPA	-	Lou Johnson
CDH	-	Joan Sowinski

It was discussed that the "star chamber" should have 10-15 days to resolve an issue. The approved revised resolution methodology will be presented to the "star chamber."

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4.) Distribution of Technical Papers on Engineered Barriers

Phil Nixon distributed the technical papers concerning Dr. Hakonson's research on engineered barriers. Randy Ogg indicated that one of the most important papers addresses the issue of clay liner integrity in semi-arid environments. Clay tends to desiccate and crack in semi-arid environments which provides a channel for precipitation to reach contaminants left in place.

Harlan Ainscough reported that the Colorado regulations do not require the use of clay materials. The use of clay is mentioned in EPA guidance documents, but it is not required. The CDH would not require the use of clay materials as long as the closure performance standards are met.

Randy Ogg is pursuing bringing Dr. Hakonson to a team meeting to present his research results.

Fraser Lockhart suggested that the soil profile at Los Alamos be compared to the Rocky Flats soil profiles, to see if the geologic characteristics are similar between the two sites. **ES will pursue this analysis.**

5.) Building 788 D&D

The issue of how to address the D&D of building 788 was discussed. Fraser Lockhart indicated that it is a complicated issue based on the schedule for completion, the development of a sitewide D&D program, the potential to reuse the building, and the regulatory drivers. Harlan Ainscough indicated that CDH would be willing to consider removing the 788 D&D activities from the Phase I IM/IRA provided that DOE presents positive and appropriate written justification for this change. **Andy Ledford needs to resolve this issue with DOE prior to the October 26, 1993 meeting.**

6.) Methodology for Developing PRGs

Phil Nixon indicated that the statistical evaluation for COCs was currently ongoing and it is hopeful that a preliminary list of COCs would be presented on October 26, 1993.

It was agreed that the Rock Creek surficial soil samples would be used for Rocky Flats surficial soil background samples.

Amy Conklin presented the approach for calculating PRGs based on the CDH/DOE/EG&G/ES meeting on October 13, 1993. ES will calculate PRGs based on an onsite resident scenario (conservative) and a worker scenario (likely). The PRGs will be calculated in reverse to determine the allowable soil contaminant concentration for a 1.0×10^{-6} risk level. ES may also perform a forward risk from all of the contaminants. calculation to determine the cumulative risk. The PRGs will be modified such that the

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cumulative risk will not exceed $1.0x10^{-6}$. **Joe Sheffell (CDH) will provide input on the PRG modification.** The default position may be to divide each PRG by the number of COCs.

Amy Conklin distributed and discussed the exposure scenario and risk assessment equations. **Phil Nixon requested that these scenarios and equations be reviewed by the team. Comments are due at the October 26, 1993 meeting.**

Harlan Ainscough indicated that the CDH might want children to be addressed separately. Phil Nixon indicated that this might be too conservative since the onsite resident scenario was highly unlikely.

7.) Phase I RFI/RI Status

R. Henry indicated that ES was on schedule for submitting the first 3 RFI/RI chapters on October 29, 1993 to EG&G.

Drilling in Ponds 207B North and Center has not yet started because of the issue concerning where the drill cuttings would be stored has not yet been resolved. EG&G is working to modify the Part A Permit for Building 788 so that the drill cuttings could be stored there. Harlan Ainscough specified that the CDH would prefer storing the investigation derived material at Buildings 1803 and 1804. He indicated that the CDH was confident that an existing storage facility permit could be modified to accept the new waste codes within 90 days. Therefore, Harlan Ainscough indicated that drilling should commence since the risks were very low. Fraser Lockhart requested that Randy Ogg prepare to mobilize the drilling as soon as possible.

8.) IM/IRA Options Analysis Update

Phil Nixon specified that ES was moving forward to obtain the engineering details for the detailed evaluation of alternatives. The alternatives have not been modified since they were presented on October 12, 1993. The determination of COCs and PRGs will be important for screening the alternatives.

9.) Other OU Considerations Relative to Closure

The OU 4 closure activities may have an impact on the following other OUs:

A) OU 8
B) OU 6
C) OU 10
D) OU 9

The impact to OU 8, 6, and 10 are not likely to be significant. The OU 9 impact is significant because the old process waste lines run through OU 4.

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The team agreed that the preferred option was to include portions of the OU 9 process waste lines within the scope and boundaries of OU 4. This would mean that the OU 9 process waste lines would be included as an integral part of the OU 4 IM/IRA. In addition, work on removing these utilities could constitute the start of remedial construction.

It was agreed that the DOE/OU 4/OU 9 representatives would meet Friday 10/22/93 to discuss the technical and administrative issues surrounding this issue.

10.) Original SEP Considerations

ES was directed to address and report as many details on the existing original ponds as soon as possible. The closure of these ponds is an issue that needs to be discussed further.

11.) Assessment of identified Issues

The modified issues list is contained below:

Item	Priority
Use of temporary units to provide/permit waste storage	2
Remediation Goals (PRGs)	5
Liner Removal -liner characterization	1
Building 788 D&D	4
OU 9 Old Process Waste Lines (OPWL) within OU 4	3
Utilities and Pond Infrastructure remediation/disposal	3a
Waste Generation/Disposal -Investigated derived waste material -Identification of waste disposal facilities	6
Consolidation of hazardous waste contaminated media without triggering LDR or landfill siting requirements	8
Identification of underground injection restrictions	7
Site logistical construction interferences	9

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It was decided that synthetic liner materials would be considered liner components and natural base course components would be considered environmental media.

Soil flushing was discussed as a technology alternative that might work if the subsurface characteristics would support effective uniform transport of injected liquids and the ITS is shown to be effective. Harlan Ainscough indicated that the Water Quality Branch would likely find it acceptable as long as the pH was within the 6.5 to 8.5 range at the Point of Compliance (POC) and other contaminants met water quality criteria at the POC. Arturo Duran indicated that soil flushing might help achieve a clean closure or could prevent/enhance groundwater treatment. Harlan will investigate whether CDH has a policy on groundwater injection.

ES is currently tasked with investigating the ITS and will investigate whether the OU4 hydrogeologic characteristics are suitable for soil flushing.

12.) Future Discussions

A) ES will present the computer graphics capabilities utilized on this project.

B) ES will present the chemical analysis results from the liners.

C) Comments on the RFI/RI and IM/IRA outline

D) NEPA update

The team meeting scheduled for November 16, 1993 will be rescheduled for Monday, November 15, 1993.

Philip Nixon, Project Manager